

Development and Activities of Visual Hands-on Teaching Materials on Structural Principle and Mechanics for the First Year Experience in the University

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For development of structural education in universities, arousal of interest and motivational enhancement of students are current major issues for Japan. The prizewinner has pointed out especially the importance of first year experience and experience-based education. From 1990 this idea was conceived, the prizewinner has advocated a new class of structural principle and mechanics using experimental and visual teaching materials as a first year experience. This is not a development of the class but also this is an innovation of teaching method. Multimedia and interactive teaching method are leveraged. It is notable in this class that a combination of a couple of experiments and description of mechanics leads to deeper understanding of each student. Two textbooks were written by the prizewinner and co-authors since 1994, and those books regard to experimental methods and the result's considerations based on mechanics. Additionally two exhibitions and structuring of mutual platform on the web were put into practice at the Architectural Institute of Japan.